In the Claims:

Claims 7-15 have been withdrawn from consideration. Claims 1-6 and 16-21 have been cancelled. Please amend Claims 22, 33, 34, 36, and 39, and add new Claims 53-56, such that the claims are as set forth below.

1-6. (Cancelled)

- 7. (Withdrawn) An optical coating for a substrate, comprising:
- a first anti-reflection layer of a dielectric;
- a first metallic layer over the first anti-reflection layer;
- a second anti-reflection layer of a dielectric over the first metallic layer;
- a second metallic layer over the second anti-reflection layer; and
- a third anti-reflection layer of a dielectric over the second metallic layer;

wherein at least one of the first anti-reflection layer, the second anti-reflection layer, and the third anti-reflection layer comprises an amorphous material, the amorphous material comprising titanium oxide and an additive, wherein the additive in an oxidized state does not form a solid solution with the titanium oxide.

- 8. (Withdrawn) The optical coating according to claim 7, wherein the additive is selected from a group consisting of silicon, aluminum, bismuth, gadolinium, tantalum, zinc, and any combination thereof.
- 9. (Withdrawn) The optical coating according to claim 7, wherein the second metallic layer comprises silver.
- 10. (Withdrawn) The optical coating according to claim 7, further comprising a barrier layer between the second anti-reflection layer and the second metallic layer.
- 11. (Withdrawn) The optical coating according to claim 7, further comprising a barrier layer between the second metallic layer and the third anti-reflection layer.

- - 13. (Withdrawn) An optical coating for a substrate, comprising:
 - a first high-refractive index layer;
 - a first low-refractive index layer over the first high-refractive index layer;
 - a second high-refractive index layer over the first-low refractive index layer; and
 - a second low-refractive index layer over the second-high refractive index layer;

wherein at least one of the first high-refractive index layer and the second high-refractive index layer comprises an amorphous material, the amorphous material comprising titanium oxide and an additive, wherein the additive in an oxidized state does not form a solid solution with the titanium oxide.

- 14. (Withdrawn) The optical coating according to claim 13, wherein the additive is selected from a group consisting of silicon, aluminum, bismuth, gadolinium, tantalum, zinc, and any combination thereof.
- 15. (Withdrawn) The optical coating according to claim 13, wherein at least one of the first low-refractive index layer and the second low-refractive index layer comprises a material selected from a group consisting of silicon dioxide and silver.

16-21. (Cancelled)

- 22. (Currently Amended) An optical coating for a substrate, comprising:
- a first anti-reflection layer of a dielectric;
- a first metallic layer over the first anti-reflection layer; and
- a second anti-reflection layer of a dielectric over the first metallic layer;

wherein at least one of the first anti-reflection layer and the second anti-reflection layer comprises an amorphous material, the amorphous material comprising titanium oxide

3

and an additive, wherein the additive in an oxidized state does not form a solid solution with the titanium oxide.

- 23. (Previously Presented) The optical coating according to claim 22, wherein the additive is selected from a group consisting of silicon, aluminum, bismuth, gadolinium, tantalum, zinc, and any combination thereof.
- 24. (Previously Presented) The optical coating according to claim 22, wherein the first metallic layer comprises silver.
- 25. (Previously Presented) The optical coating according to claim 22, further comprising a barrier layer between the first anti reflection layer and the first metallic layer.
- 26. (Previously Presented) The optical coating according to claim 22, further comprising a barrier layer between the first metallic layer and the second anti-reflection layer.
- 27. (Previously Presented) The optical coating according to claim 25 or 26, wherein the barrier layer comprises a material selected from a group consisting of titanium, nickel-chromium, aluminum, and zinc.
- 28. (Previously Presented) The optical coating according to claim 22, wherein the amorphous material remains substantially unchanged in amorphism at a heat-treatment temperature of the substrate.
- 29. (Previously Presented) The optical coating according to claim 22, wherein the amorphous material remains substantially unchanged in refractive index at a heat-treatment temperature of the substrate.
- 30. (Previously Presented) The optical coating according to claim 22, wherein the amorphous material remains substantially unchanged in size at a heat-treatment temperature of the substrate.

- 31. (Previously Presented) The optical coating according to claim 28, 29, or 30, wherein the heat-treatment temperature is below a crystallization temperature of the amorphous material.
- 32. (Previously Presented) The optical coating according to claim 28, 29, or 30, wherein the heat-treatment temperature is selected from a group consisting of a frit-sealing temperature, a heat-strengthening temperature, a shaping or bending temperature, and a tempering temperature.
- 33. (Currently Amended) The optical coating according to claim 22, wherein the amorphous material of the at least one of the first anti-reflection layer and the second anti-reflection layer that comprises the amorphous material is sufficient to reduce atmospheric oxidation of an underlying a layer underlying the at least one of the first anti-reflection layer and the second anti-reflection layer that comprises the amorphous material.
- 34. (Currently Amended) The optical coating according to claim 22, wherein the amorphous material of the at least one of the first anti-reflection layer and the second anti-reflection layer that comprises the amorphous material is sufficient to reduce contaminant migration to an overlying a layer overlying the at least one of the first anti-reflection layer and the second anti-reflection layer that comprises the amorphous material.
- 35. (Previously Presented) The optical coating according to claim 22, wherein the amorphous material is sufficient to reduce haze.
- 36. (Currently Amended) The optical coating according to claim 22, wherein the amorphous material of the at least one of the first anti-reflection layer and the second anti-reflection layer that comprises the amorphous material is sufficient to reduce contaminant interdiffusion between an underlying a layer underlying the at least one of the first anti-reflection layer and the second anti-reflection layer that comprises the amorphous material and an overlying a layer overlying the at least one of the first anti-reflection layer and the second anti-reflection layer that comprises the amorphous material.

- 37. (Previously Presented) The optical coating according to claim 22, wherein a crystallization temperature of the amorphous material is above about 300 °C.
- 38. (Previously Presented) The optical coating according to claim 22, wherein a refractive index of the amorphous material is above about 2.1.
 - 39. (Currently Amended) A method of processing a substrate, comprising: depositing a first anti-reflection layer of a dielectric over a the substrate; depositing a metallic layer over the first anti-reflection layer; and depositing a second anti-reflection layer of a dielectric over the metallic layer;

wherein at least one of the first anti-reflection layer and the second anti-reflection layer comprises an amorphous material, the amorphous material comprising titanium oxide and an additive, wherein the additive in an oxidized state does not form a solid solution with the titanium oxide.

- 40. (Previously Presented) The method of claim 39, wherein at least one of the depositing a first anti-reflection layer, the depositing a metallic layer, and the depositing a second anti-reflection layer comprises sputtering.
- 41. (Previously Presented) The method of claim 39, wherein at least one of the depositing a first anti-reflection layer and the depositing a second anti-reflection layer comprises sputtering, in an oxygen environment, a target comprising titanium and the additive.
- 42. (Previously Presented) The method of claim 39, wherein at least one of the depositing a first anti-reflection layer and the depositing a second anti-reflection layer comprises sputtering, in an oxygen environment, a first target comprising titanium and a second target comprising the additive.

- 43. (Previously Presented) The method of claim 39, wherein the additive is selected from a group consisting of silicon, aluminum, bismuth, gadolinium, tantalum, zinc, and any combination thereof.
- 44. (Previously Presented) The method of claim 39, wherein the amorphous material is deposited at a high absolute deposition rate.
- 45. (Previously Presented) The method of claim 44, wherein the absolute deposition rate is greater than about five angstroms per second.
- 46. (Previously Presented) The method of claim 39, wherein the amorphous material is deposited at a low temperature.
- 47. (Previously Presented) The method of claim 46, wherein the temperature is in a range of about 20 °C to about 40 °C.
- 48. (Previously Presented) The method of claim 39, wherein the amorphous material is deposited at a high absolute deposition rate and a low temperature.
- 49. (Previously Presented) The method of claim 39, further comprising, after said depositing of the first anti-reflection layer, the metallic layer, and the second anti-reflection layer, heating the substrate to at least a heat-treatment temperature of the substrate.
- 50. (Previously Presented) The method of claim 49, wherein the heat-treatment temperature is below a crystallization temperature of the amorphous material.
- 51. (Previously Presented) The method of claim 49, wherein the heat-treatment temperature is selected from a group consisting of a frit-sealing temperature, a heat-strengthening temperature, a shaping or bending temperature, and a tempering temperature.

- 52. (Previously Presented) The method of claim 49, further comprising at least one of fritting, heat-strengthening, shaping or bending, and tempering of the substrate.
- 53. (New) The optical coating according to claim 22, wherein at least the second anti-reflection layer comprises the amorphous material and is sufficient to reduce atmospheric oxidation of the first metallic layer.
- 54. (New) The optical coating according to claim 22, wherein at least the first anti-reflection comprises the amorphous material and is sufficient to reduce contaminant migration to the first metallic layer.
- 55. (New) The optical coating according to claim 22, wherein at least the second anti-reflection layer comprises the amorphous material and is sufficient to reduce contaminant interdiffusion between the first metallic layer and a layer overlying the second anti-reflection layer.
- 56. (New) The optical coating according to claim 22, wherein at least the first anti-reflection layer comprises the amorphous material and is sufficient to reduce contaminant interdiffusion between the substrate and the first metallic layer.